

In the Claims

1-10. (cancelled)

11. (currently amended) An isolated biologically active beta-secretase polypeptide selected from the group consisting of:

- a) the polypeptide of ~~any of~~ SEQ ID NOs: 4, 5, and 6;
- b) a fragment of ~~any of~~ SEQ ID NOs: 4, 5, and 6;
- c) a polypeptide having one to fifty conservative amino acid changes as compared with the polypeptide of SEQ ID NO: 4; and
- d) the polypeptide encoded by the DNA vector insert of ATCC Deposit Nos. 207158 and 207159.

12. (currently amended) An isolated biologically active beta-secretase polypeptide encoded by a nucleic acid molecule selected from the group consisting of:

- a) a nucleic acid molecule as set forth in ~~any of~~ SEQ ID Nos NO:1, 2, and 3;
- b) a nucleic acid molecule encoding the polypeptide of ~~any of~~ SEQ ID NOs: 4, 5, and 6;
- c) fragments of SEQ ID NOs: 1, 2, and 3;
- d) a nucleic acid molecule of the DNA vector insert in ATCC deposit No. 207158;
- e) a nucleic acid molecule of the DNA vector insert in ATCC deposit No. 207159; and
- f) a nucleic acid molecule having one to fifty conservative amino acid substitutions as compared with the polypeptide of SEQ ID NO:4.

13. (original) An isolated polypeptide having the amino acid sequence of SEQ ID NO:4.

14. (currently amended) An isolated ~~beta-secretase-polypeptide~~ fragment of SEQ ID NO:4 selected from the group consisting of: amino acids 45-501; amino acids 46-501; amino acids 46-460; amino acids 45-460; amino acids 1-460; amino acids 93-292; amino acids 93-293; amino acids 91-295; amino acids 90-295; amino acids 90-300; amino acids 62-420; amino acids 1-420; amino acids 62-460; amino acids 90-460; amino acids 62-501; amino acids 62-460; amino acids 46-420; amino acids 73-420; amino acids 83-420; amino acids 90-420; amino acids 62-417; amino acids 73-417; amino acids 83-417; amino acids 90-417; amino acids 62-410; amino acids 73-410; amino acids 83-410; amino acids 90-410; amino acids 62-402; amino acids 73-402; amino acids 83-402; and amino acids 90-402.

15. (currently amended) An antibody or fragment thereof specifically binding the polypeptide of Claim ~~10~~11.

16. (original) The antibody of Claim 15 that is a monoclonal antibody.

17-21. (cancelled)

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